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B41J 2/16

(52) UK CL (Edition V)
B6F FLP

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EP 0430593 A2 JP 2000255069 A

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INT CL[7] B41J
Other: Online: EPODOC JAPIO WPI

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(54) Abstract Title
Substrate and method of forming substrate for fluid ejection device

(57) A method of forming an opening (50/50'/150/150') through a substrate (60) includes etching into the substrate from a first side (62) so as to form a first portion (52/152) of the opening, etching into the substrate from a second side (64) opposite the first side so as to form a second portion (54/154) of the opening, continuing etching into the substrate from at least one of the first side and the second side toward the other of the first side and the second side so as to communicate the first portion and the second portion of the opening, and etching into the substrate from an interface (55/155) between the first portion and the second portion of the opening, including etching toward the second side of the substrate and forming a third portion (56/56'/156) of the opening. There is also a substrate (60) for a fluid ejection device having a fluidic channel (50) formed by the method described above. The fluid ejection device may be an inkjet printhead.

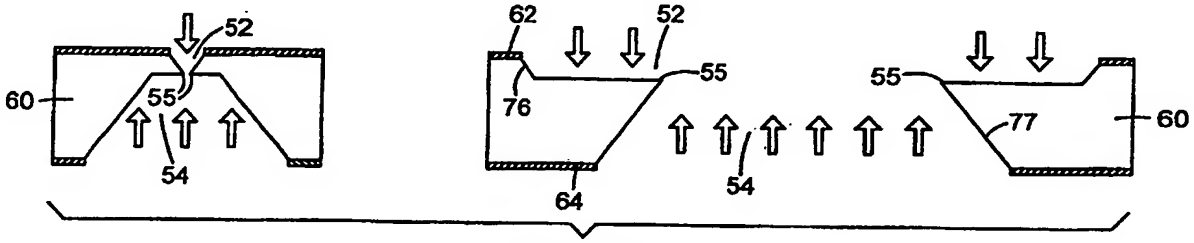

Fig. 5C

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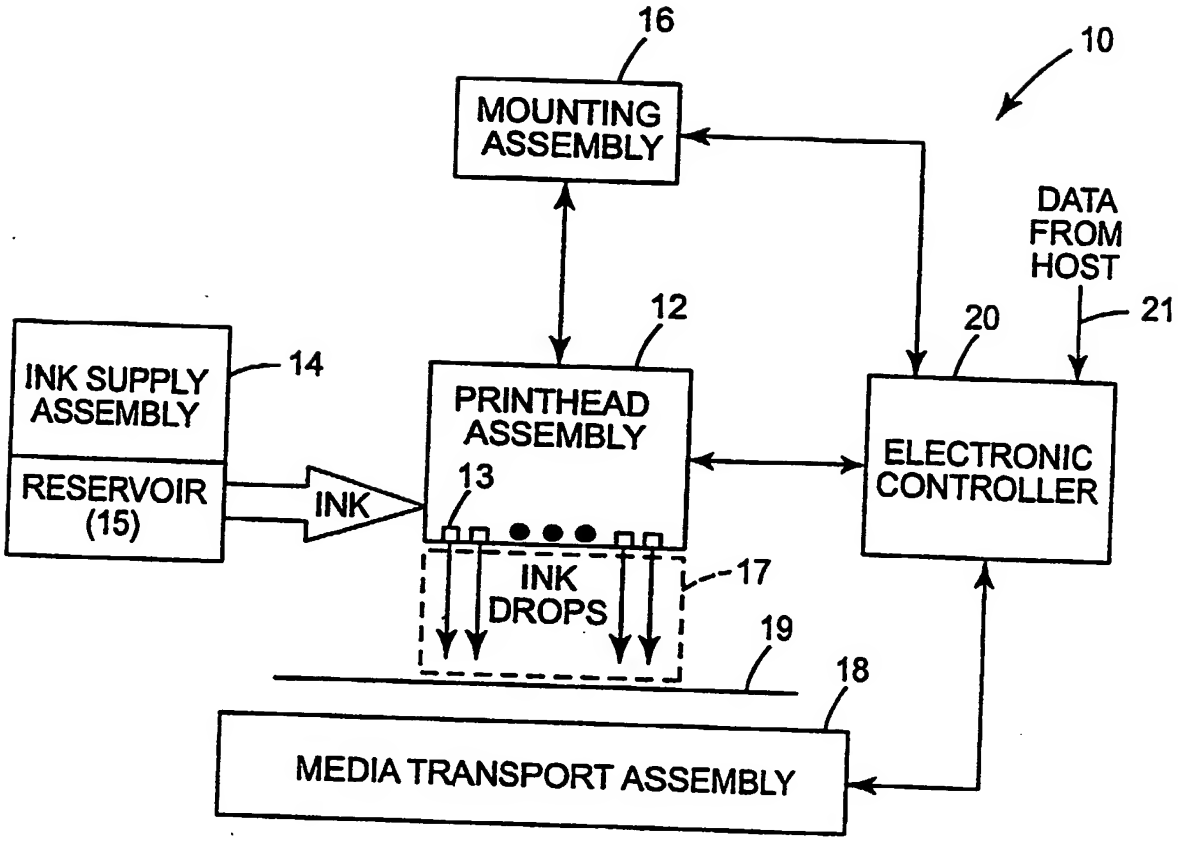

16
10
MOUNTING ASSEMBLY
DATA FROM HOST
21
20
12
INK SUPPLY ASSEMBLY
14
PRINTHEAD ASSEMBLY
ELECTRONIC CONTROLLER
RESERVOIR (15)
INK
13
INK DROPS
17
19
18
MEDIA TRANSPORT ASSEMBLY

Fig. 1

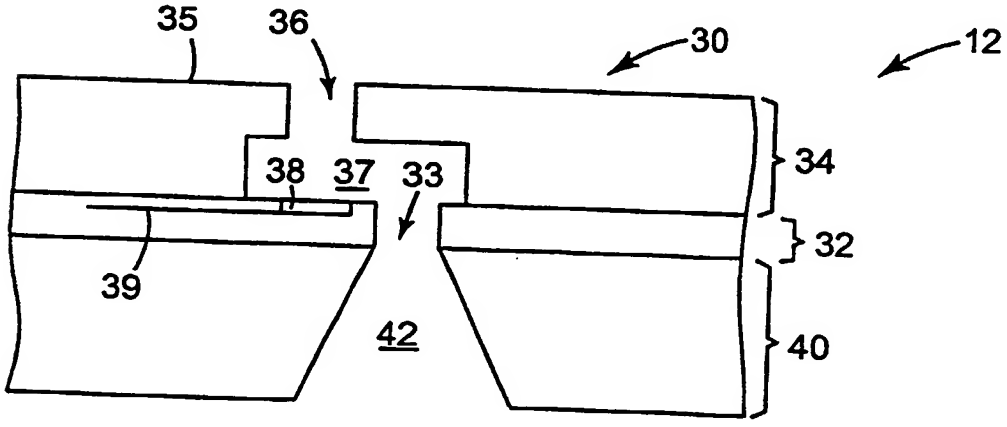

35
36
30
12
38
37
33
34
32
39
42
40

Fig. 2

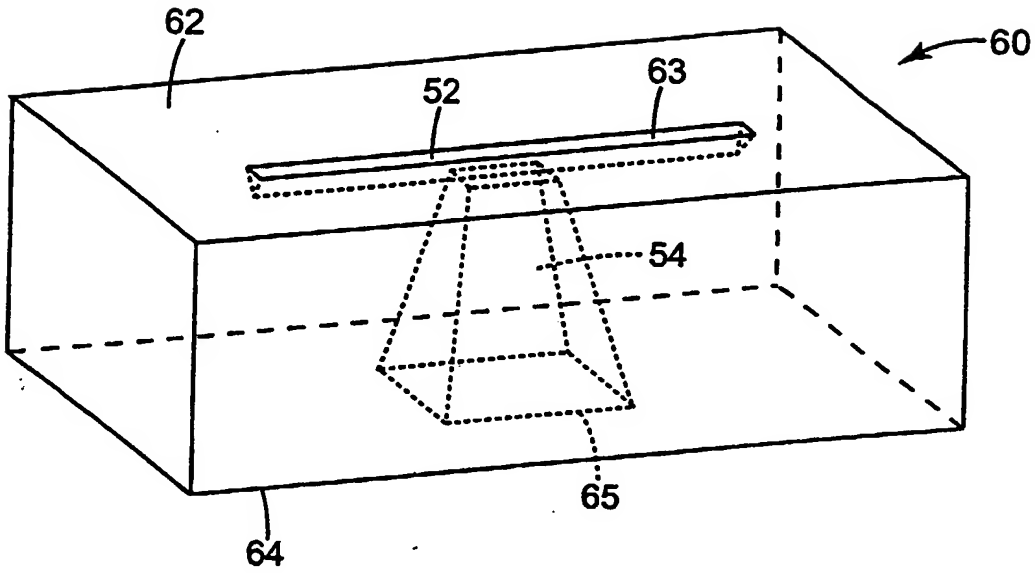


Fig. 3A

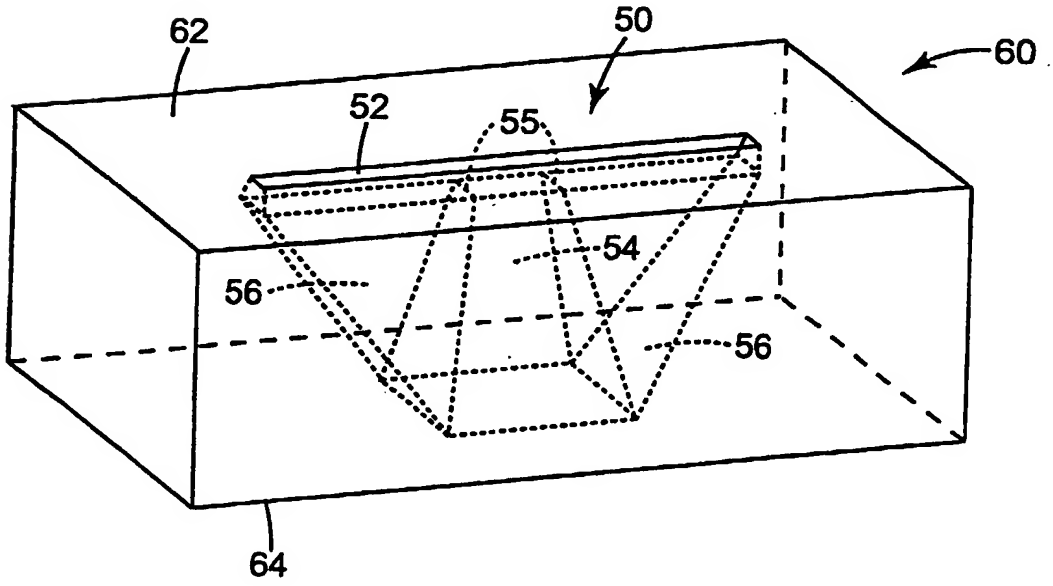


Fig. 3B

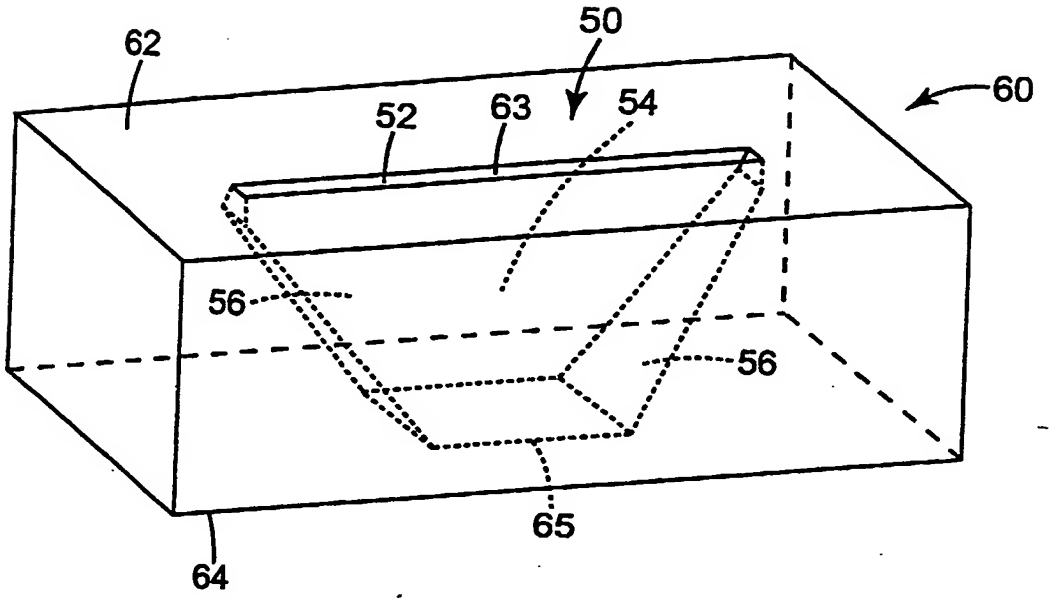


Fig. 3C

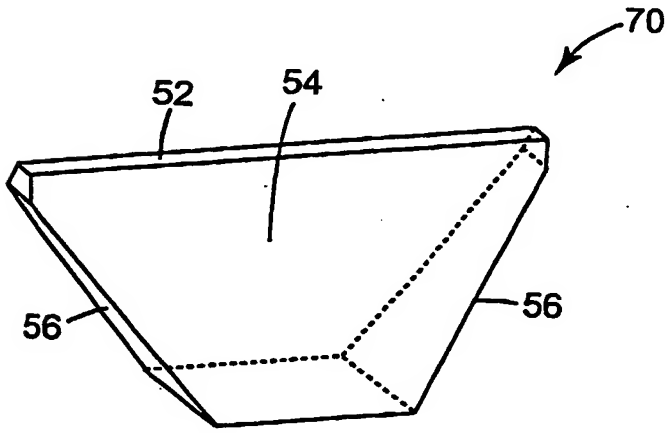


Fig. 3D

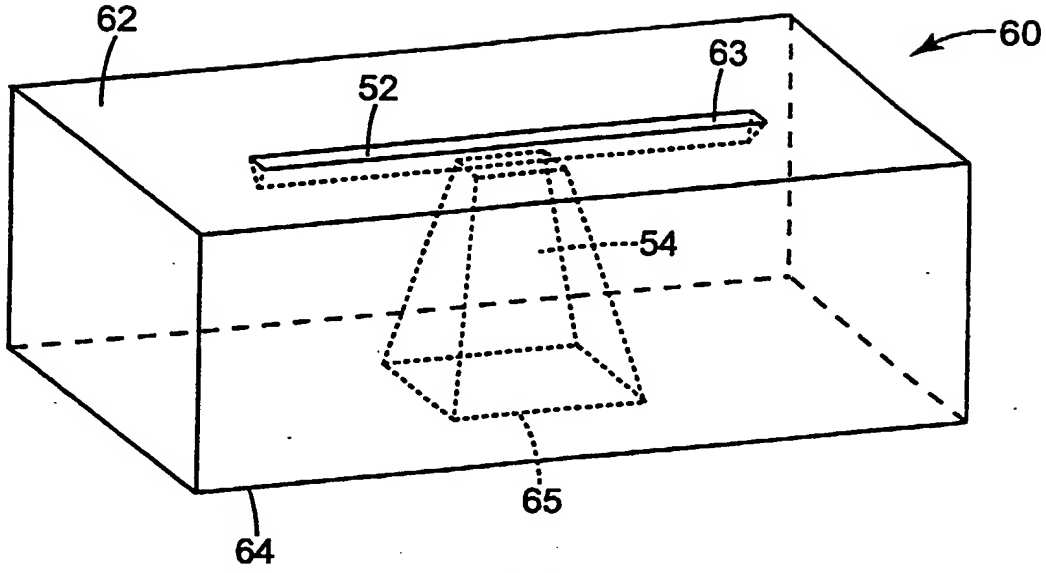


Fig. 4A

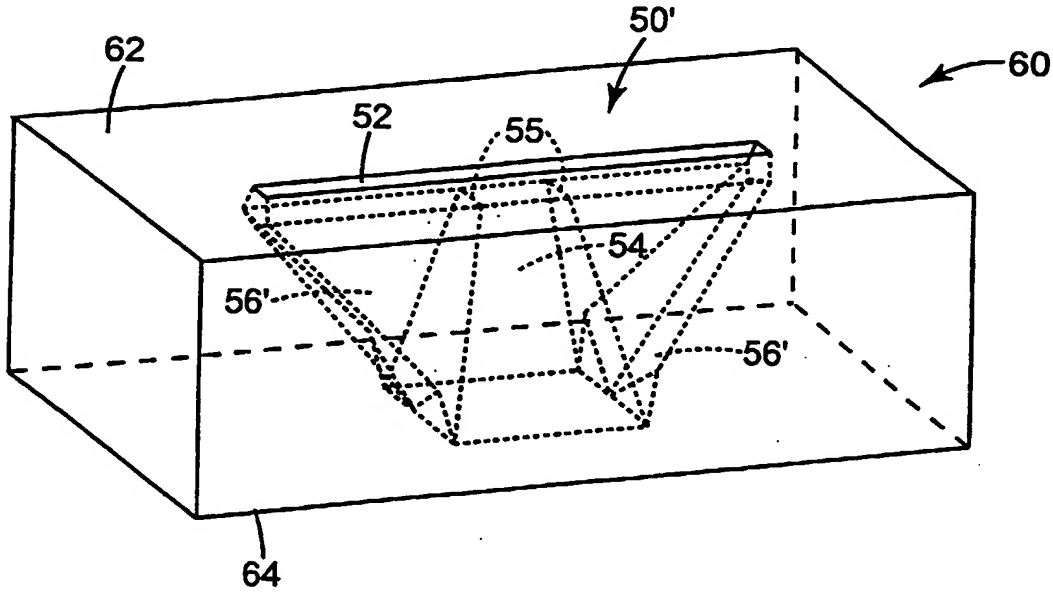


Fig. 4B

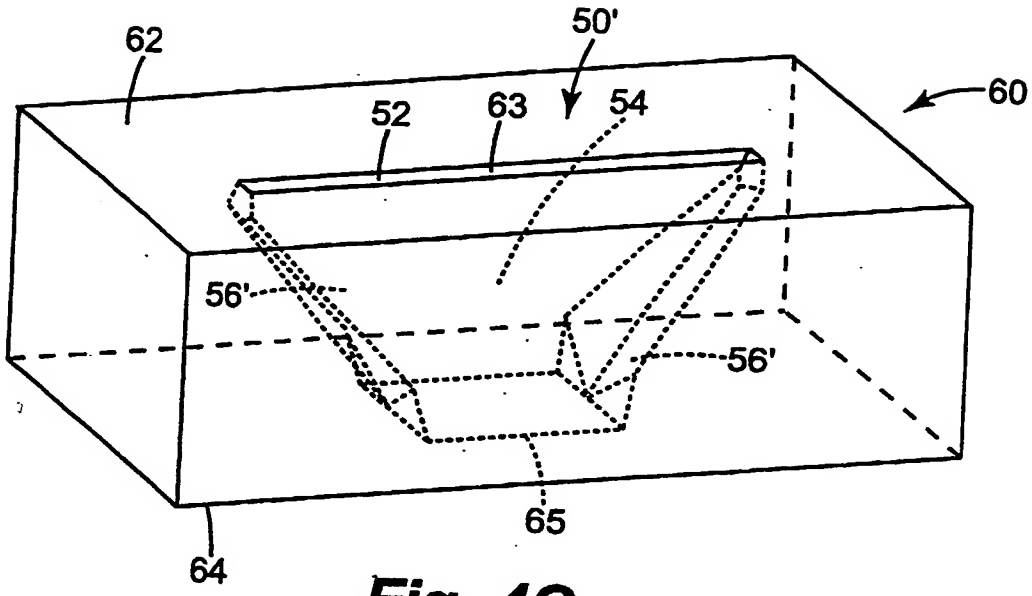


Fig. 4C

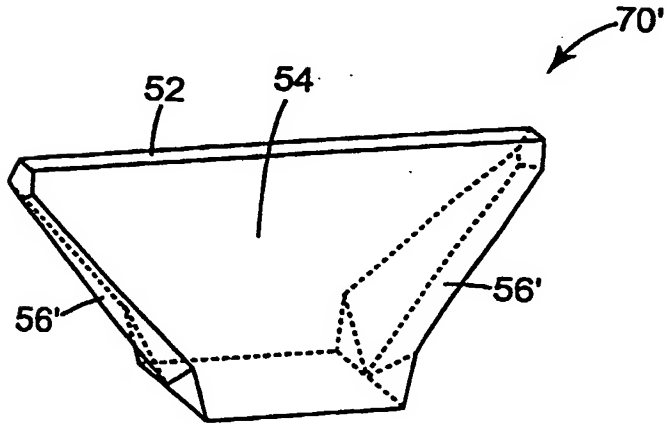


Fig. 4D

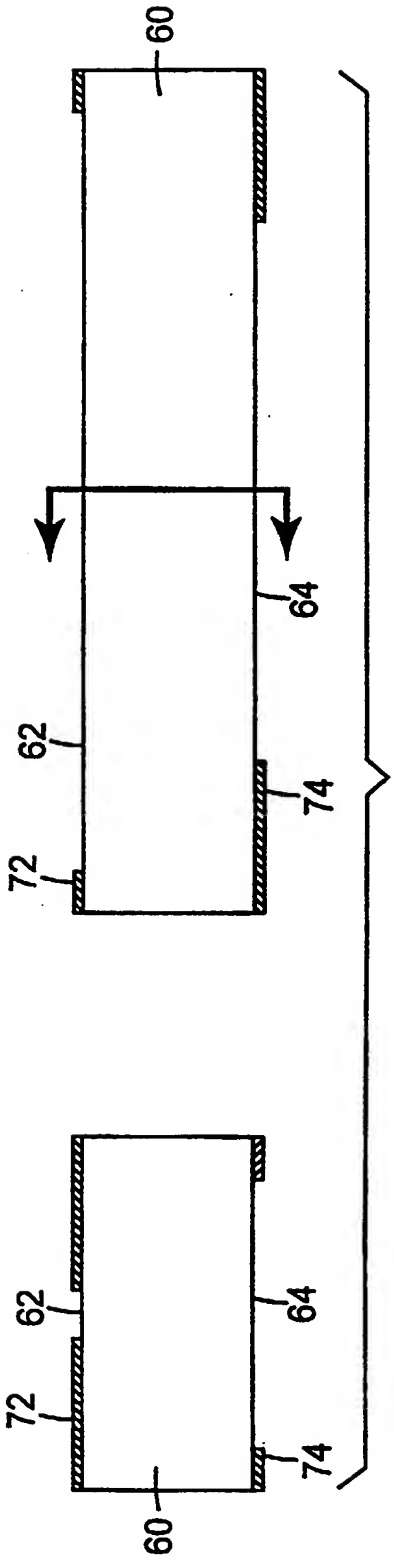


Fig. 5A

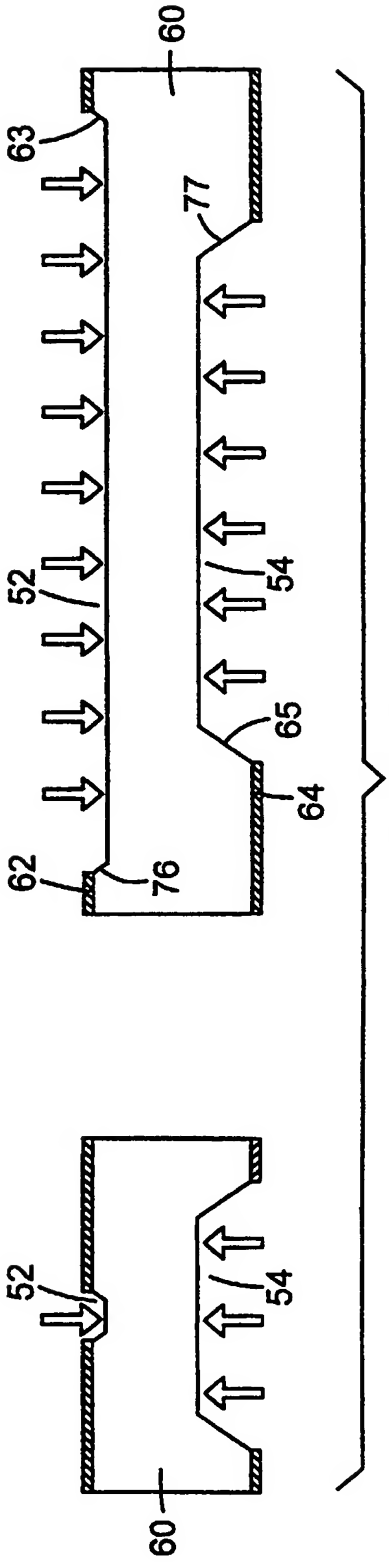


Fig. 5B

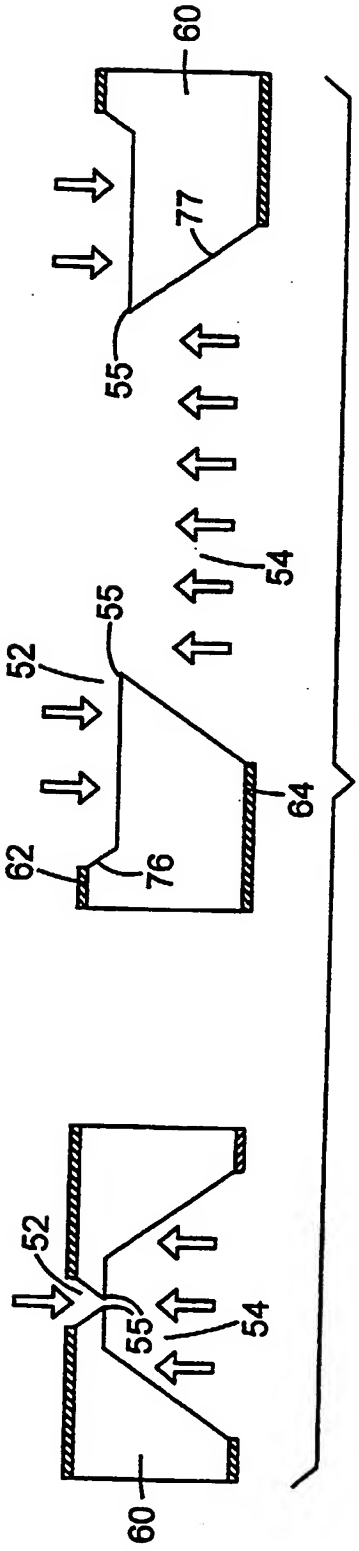


Fig. 5C

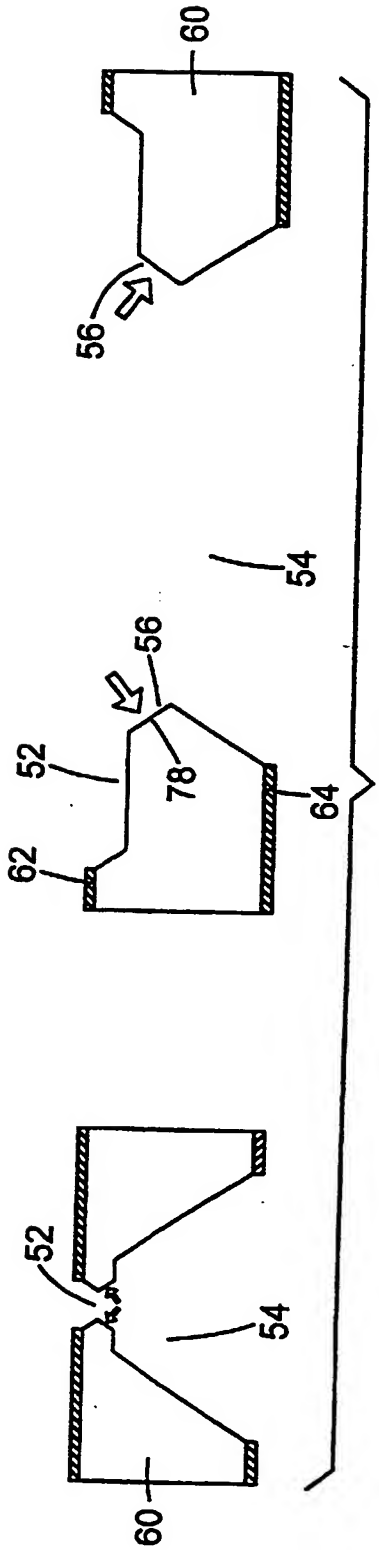


Fig. 5D

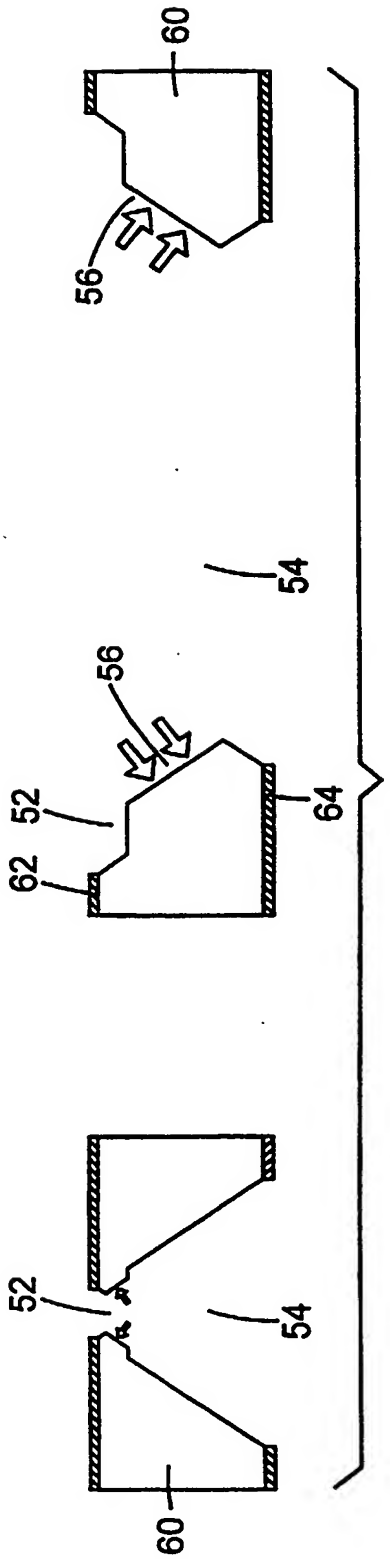


Fig. 5E

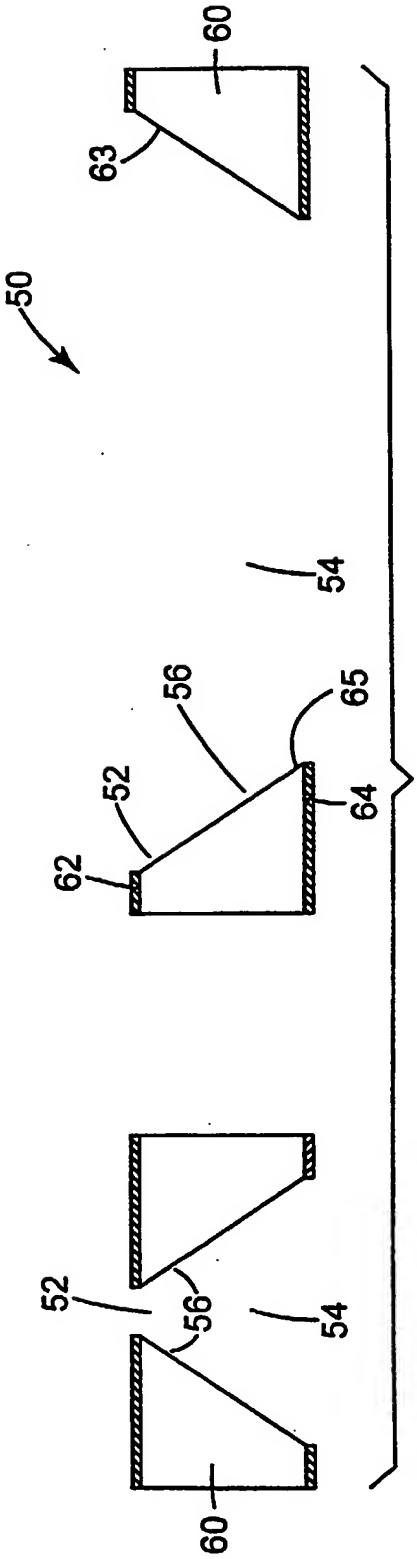


Fig. 5F

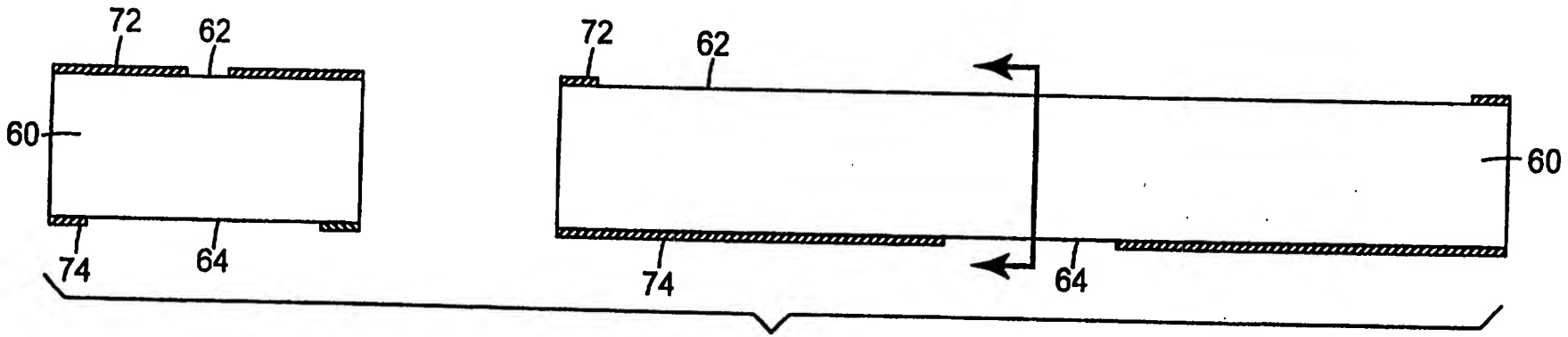


Fig. 6A

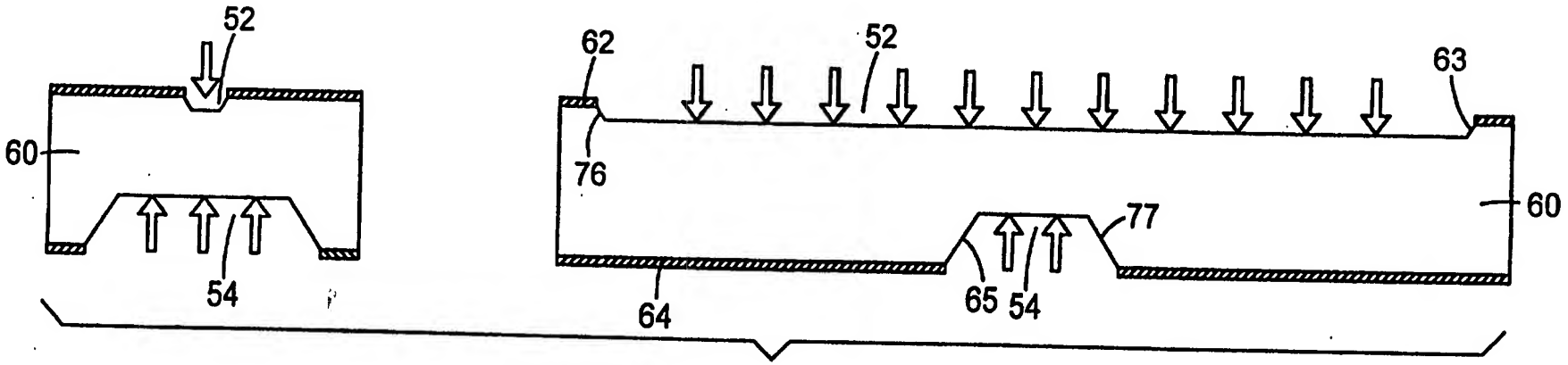


Fig. 6B

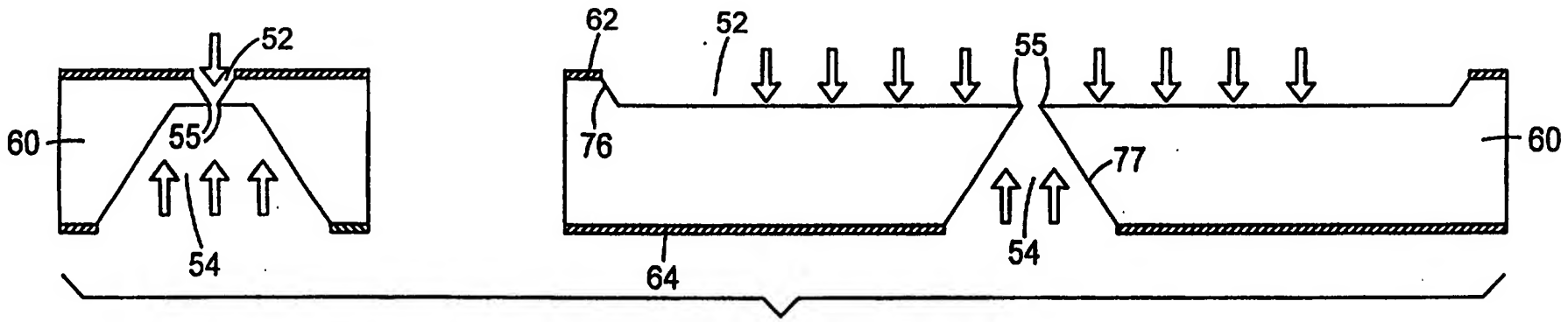


Fig. 6C

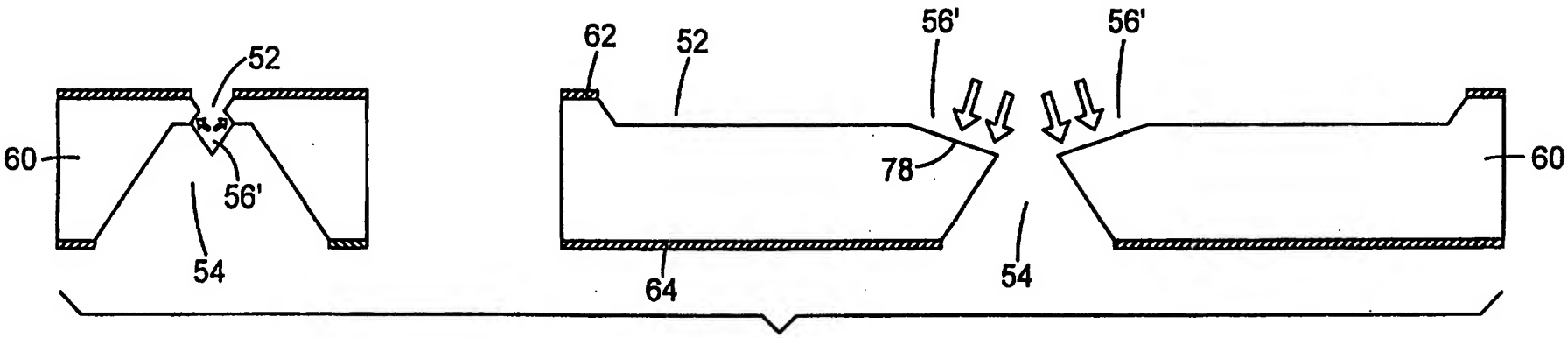


Fig. 6D

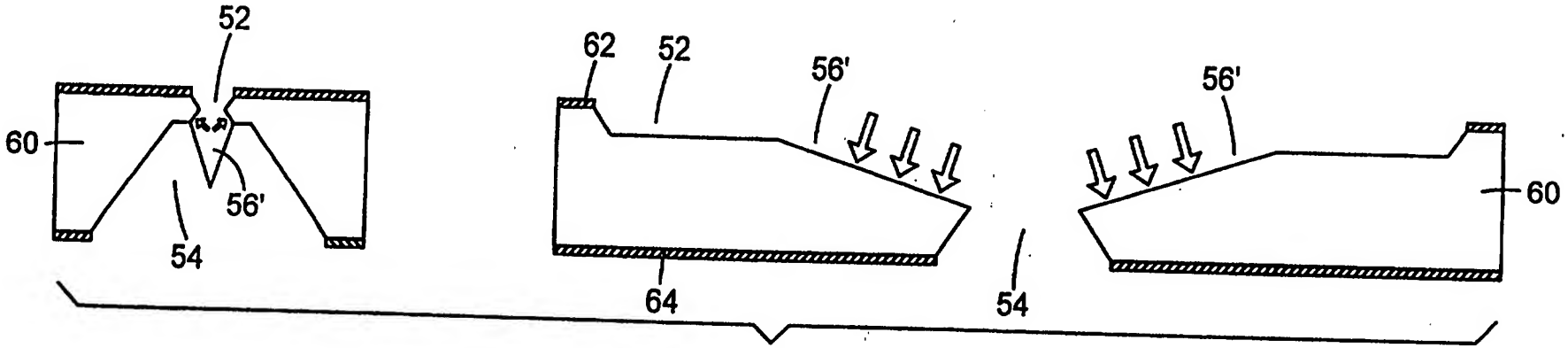
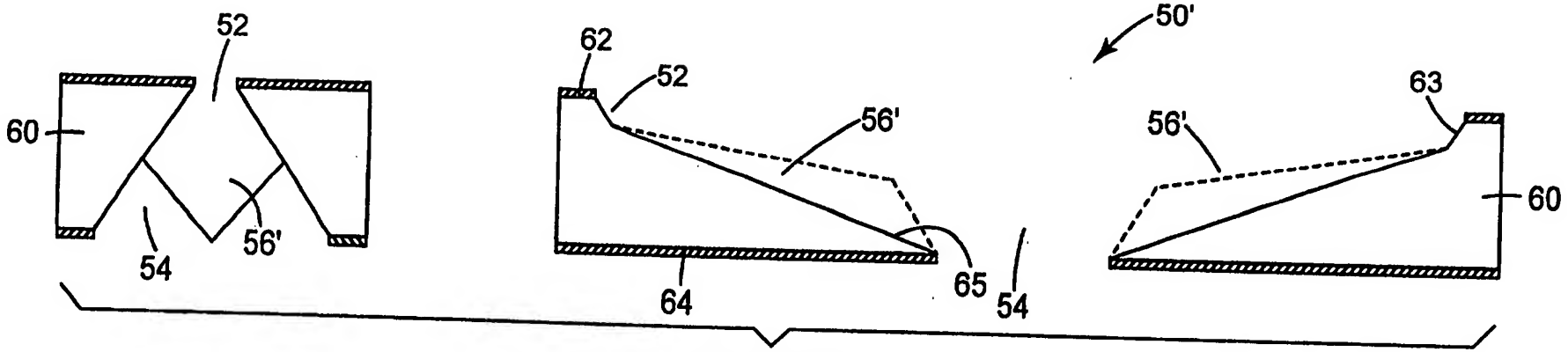

52
60
56'
54
62
52
56'
64
54
56'
60

Fig. 6E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60
54
56'
62
52
56'
64
65
54
50'
63
56'
60

Fig. 6F

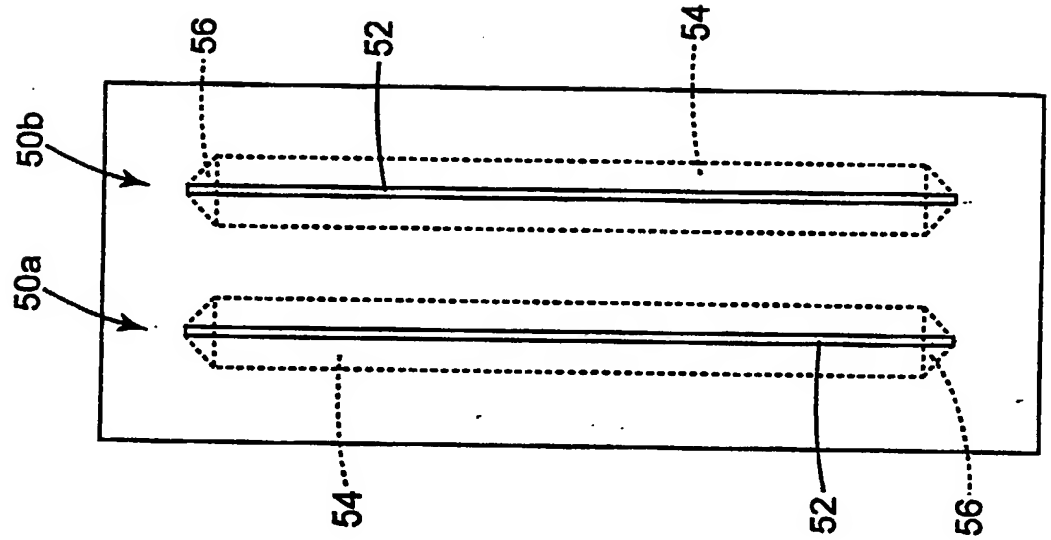

Fig. 8

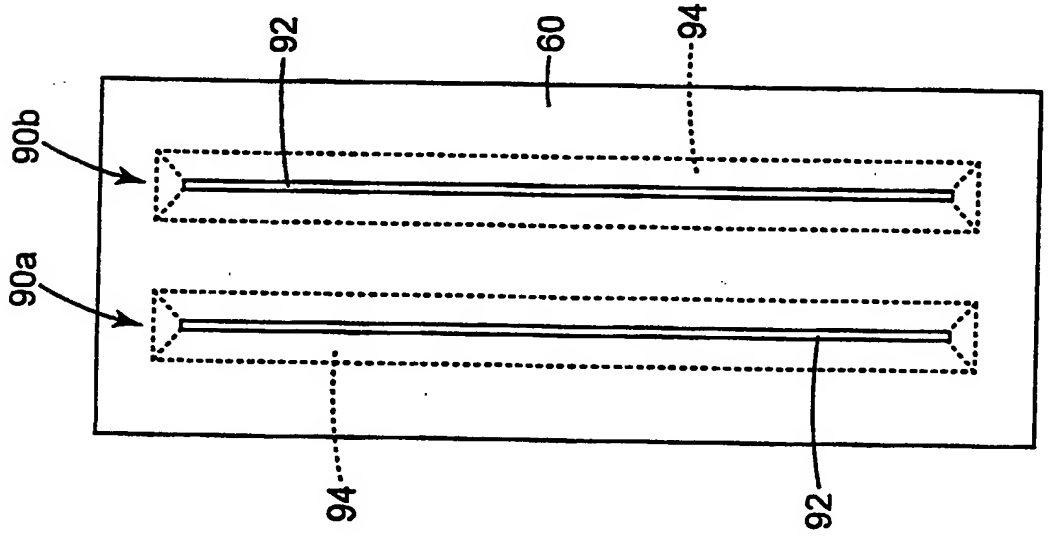

Fig. 7
PRIOR ART

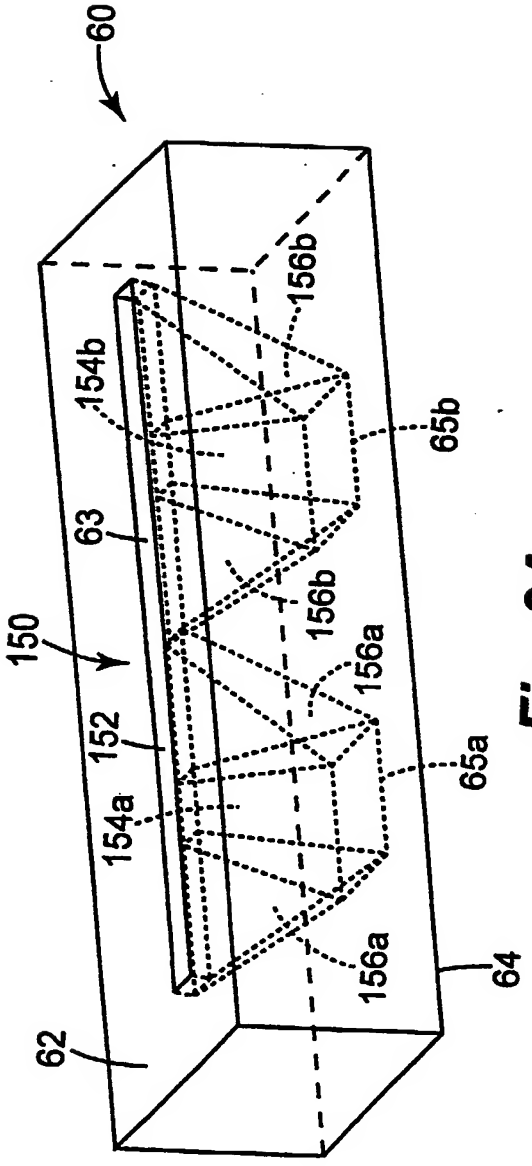
60
150
152
154a
154b
156a
156b
63
65a
65b
62
64

Fig. 9A

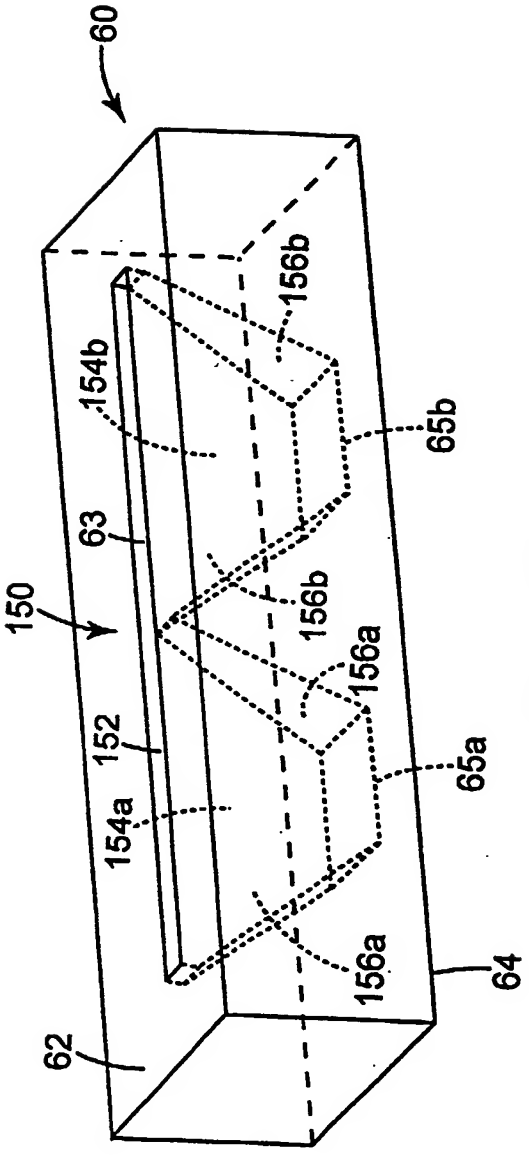
60
150
152
154a
154b
156a
156b
63
65a
65b
62
64

Fig. 9B

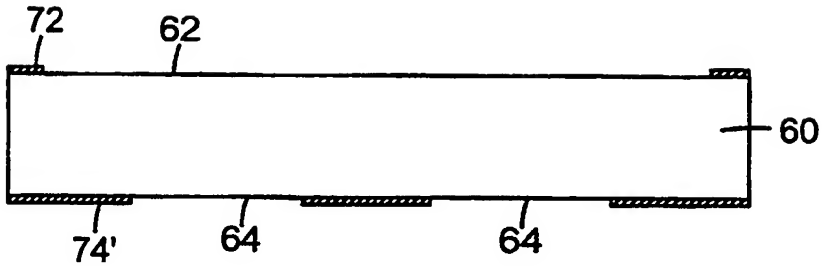

Fig. 10A

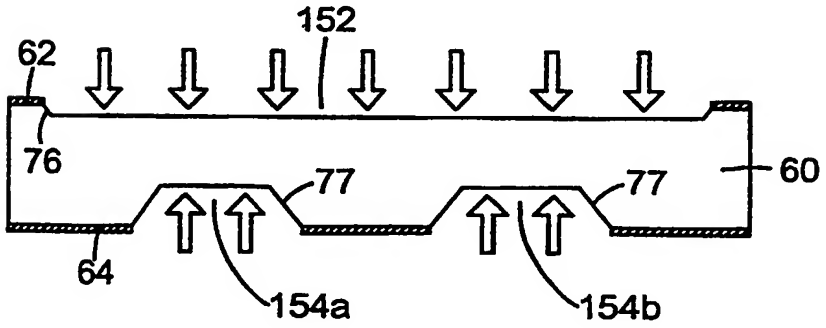

Fig. 10B

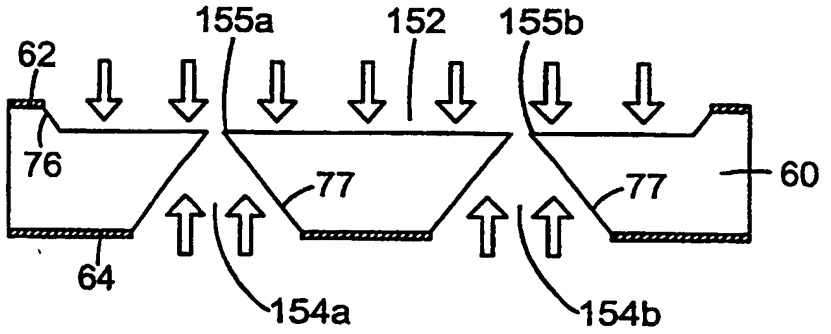

Fig. 10C

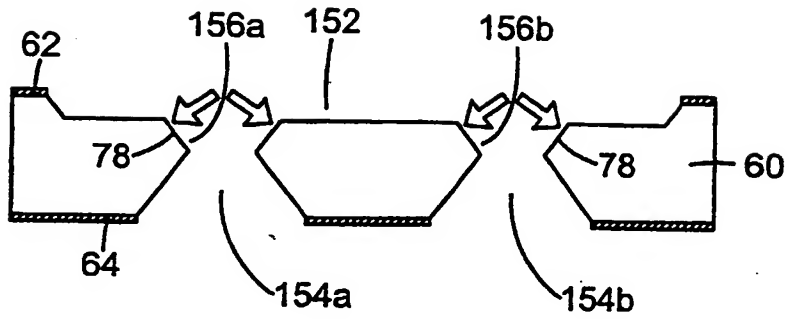

Fig. 10D

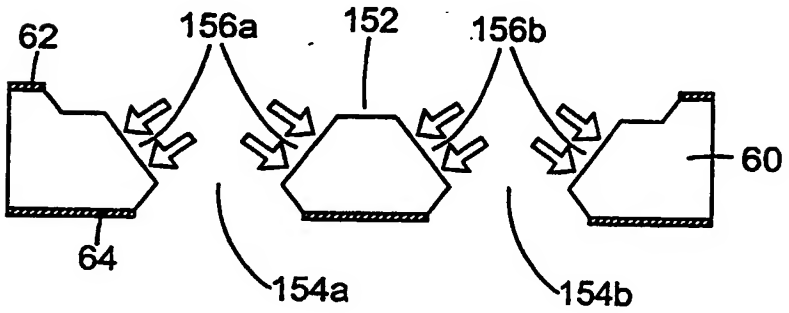

Fig. 10E

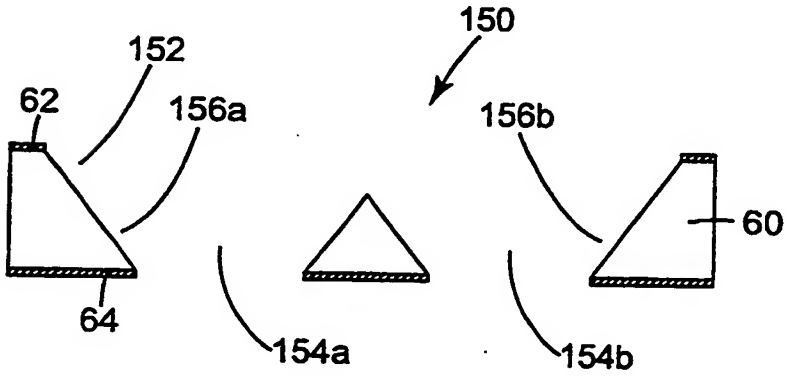

Fig. 10F

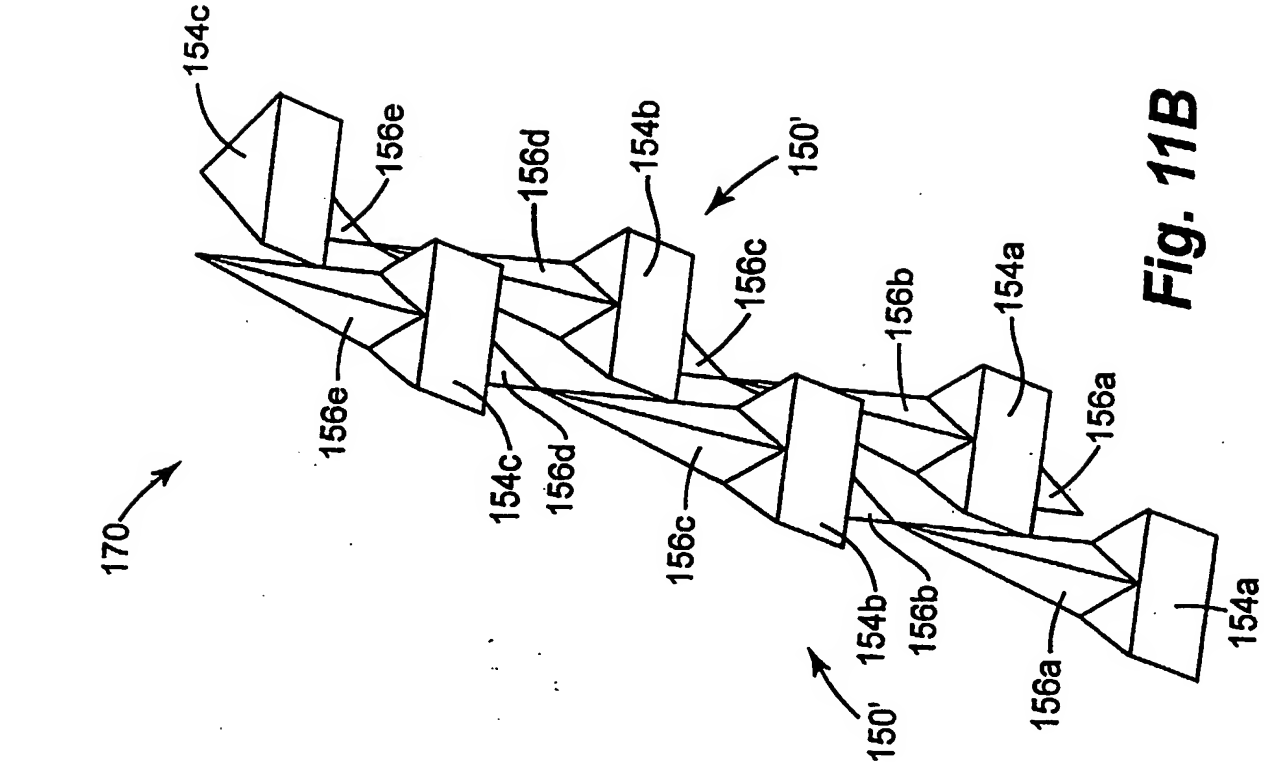

Fig. 11A

Fig. 11B

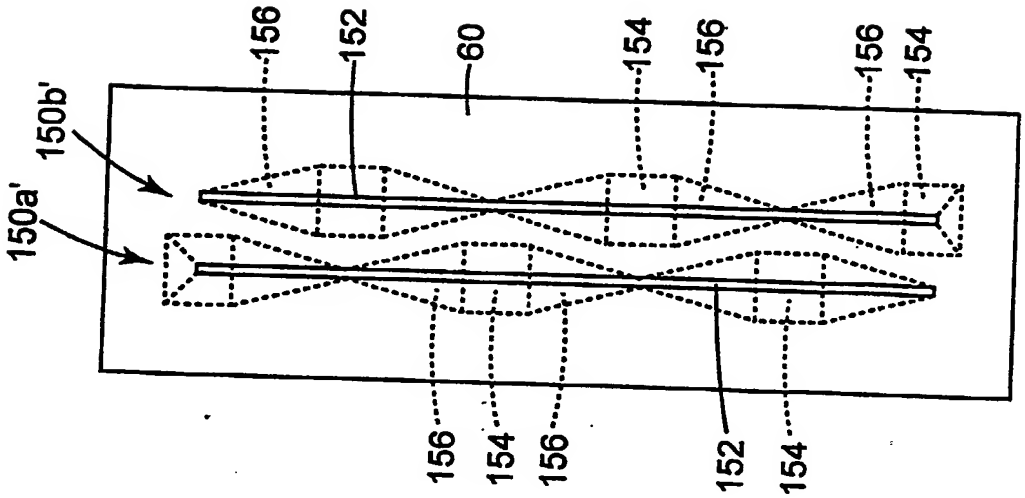
156
152
60
154
156
156
154
150b'
150a'
156
154
156
152
154

Fig. 13

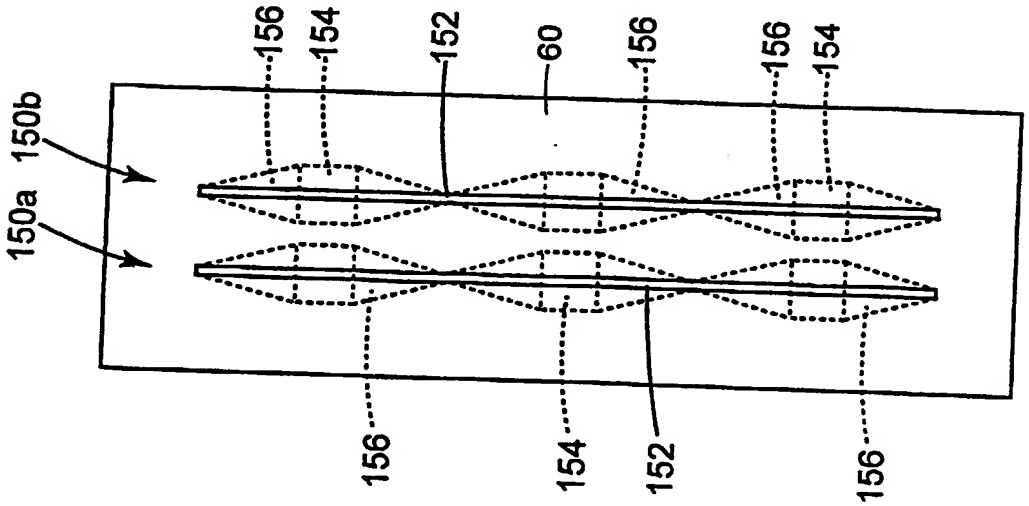
156
154
152
60
156
156
154
150b
150a
156
154
152
156

Fig. 12